



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,997	11/05/2003	Arnett R. Weber	60,130-1885; 02MRA0391	6647

26096 7590 10/12/2004  
CARLSON, GASKEY & OLDS, P.C.  
400 WEST MAPLE ROAD  
SUITE 350  
BIRMINGHAM, MI 48009

EXAMINER

SCHWARTZ, CHRISTOPHER P

ART UNIT	PAPER NUMBER
----------	--------------

3683

DATE MAILED: 10/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/701,997

Applicant(s)

WEBER, ARNETT R.

Examiner

Christopher P. Schwartz

Art Unit

3683

*[Handwritten signature]*

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-1449)
- 6) ☐ Other: \_\_\_\_\_

*[Handwritten signature]*  
CHRISTOPHER P. SCHWARTZ  
PRIMARY EXAMINER

### DETAILED ACTION

The amendment filed 7/13/04 has been received and considered along with the newly filed IDS statement.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Sakai et al.

Harrison discloses a leveling system for a vehicle which is able to compensate for changes in temperature via the valves at 25 and 28. See column 1 lines 57-60 and column 2 lines 17-25. Note also the absorber/spring at 21

Harrison lacks the specifics of the shock absorber/air spring combination.

Sakai et al. is relied upon to show a known general type of absorber -spring combination in the several embodiments.

One having ordinary skill in the art at the time of the invention would have found it obvious to have utilized an absorber/spring combination in the system of Harrison as taught by Sakai et al. so that the damping and leveling characteristics of the system may be readily adjusted.

As discussed in the Harrison patent a number of options are provided for compensating for temperature rises which in turn lead to excessive pressure build up in the system. Temperature rises within the reservoirs can cause the air within to be blown off into the atmosphere through the dump or relief valves, dependent upon which option is used (see the discussion in column 3). See column 2 lines 13-24 and column 3 lines 15-19. Note that cooler atmospheric air may be introduced into the system, even if in small amounts. But it seems this amount will depend upon which optional arrangement discussed in column 3 is utilized.

3. Claims 2-5 rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Sakai et al. as applied to claim 1 above, and further in view of Chamberlin et al.

Regarding claim 2 Harrison as modified lacks a specific showing of a temperature responsive valve that opens to allow air to leave the air spring upon reaching a predetermined temperature.

However such valves are notoriously well known in the art to compensate for temperature changes and therefor the ride and/or handling characteristics of the vehicle. Chamberlin et al. is relied upon to provide this known teaching in column 1.

Accordingly one having ordinary skill in the art at the time of the invention would have found it obvious to have used temperature sensitive valving in the system of Harrison as modified to adjust the ride and/or handling characteristics upon a predetermined temperature change in the air/gas pressure in the air chamber.

Art Unit: 3683

Regarding claim 3 although the valves of Harrison are pressure sensitive valves, temperature sensitive valves could be employed simply as an alternative equivalent. Note the "cooler" air could come from the atmosphere (even if in small amounts) but also from the low pressure reservoir.

The limitations of claim 4 would simply amount to alternate equivalent choice of design that is known in the art.

Regarding claim 5 in view of the discussion above, these requirements are considered to be met.

### ***Response to Arguments***

4. Applicant's arguments filed 7/13/04 have been fully considered but they are not persuasive. The system of Harrison allows cooler air from the atmosphere to replace hotter air within the system which can be released to the atmosphere through one or more valves upon excessive pressure build up.

In claim 1 applicants merely claim "a control for avoiding an undesirably high temperature within the air volume by replacing hotter air with cooler air", a statement of intended use. The device of Harrison, as modified by Sakai et al., is capable of functioning in the claimed manner.

Applicants have made no effort to amend claim 1 to define over the prior art of record. Consequently, the examiner maintains the previous rejection is proper, has addressed applicants arguments in the action above, and the action is therefore made final.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

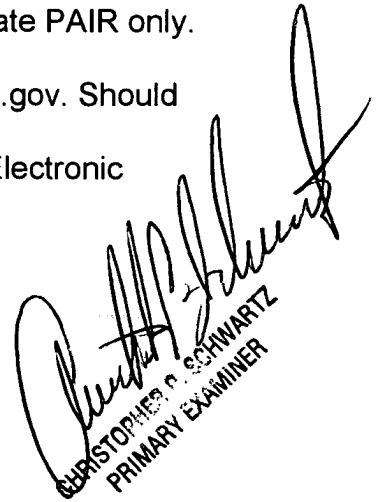
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Schwartz whose telephone number is 703-308-0576. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack W. Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cps  
9/23/04



CHRISTOPHER C. SCHWARTZ  
PRIMARY EXAMINER